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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,308	07/30/2003	Robert M. Rauker	1001.1512101	9063
11050 7590 02/22/2011 SEAGER, TUFTE & WICKHEM, LLC 1221 Nicollet Avenue Suite 800 Minneapolis, MN 55403				
EXAMINER				
BLATT, ERIC D				
ART UNIT		PAPER NUMBER		
3734				
MAIL DATE		DELIVERY MODE		
02/22/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/630,308

Applicant(s)

RAUKER ET AL.

Examiner

Eric Blatt

Art Unit

3734

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-10,12-15,23 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-10,12-14,23 and 26-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7-29-2010 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Belef et al. (US 7,169,165) in view of Perkins et al. (US 6,398,775).

Belef discloses a filter delivery catheter (Figures 1B and 3A) comprising an elongated shaft 30 and a blood permeable filtration device 50 having a proximally-facing mouth, an expanded configuration and a collapsed configuration being sized to fit within the shaft lumen. There is a guidewire 20 slidably disposed within the shaft lumen 11 wherein the guidewire 20 passes through the aspiration port 16.

Belef thus discloses all elements of claim 23 except for a plurality of aspiration ports located circumferentially on the elongated shaft wherein all of said ports are located proximally of the filtration device when the filtration device is entirely contained within the shaft lumen. Although Belef does not directly address aspiration in the embodiments shown in Figures 1B and 3A, Belef does discuss connecting the proximal end of the shaft to a suction source to aspirate embolic material at the distal end of the shaft in other embodiments. (See at least Col. 8, Ln 39-40) Perkins discloses a related apparatus for occluding and aspirating a lumen (Figure 6) and teaches providing a plurality of aspiration ports 106 such that the aspiration ports are located that a plurality of aspiration ports 114 may be provided proximate the end of the catheter in order to aspirate embolic debris. Perkins further teaches that it is desirable to locate the aspiration ports proximal to the occlusion balloon in order to allow substances to be removed from a region of the vessel lying proximal to said balloon. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Belef by providing aspiration ports proximal to the balloon on the shaft to achieve these benefits as taught by Perkins. Providing the aspiration ports removed proximally a distance from the balloon on shaft 30 would configure the ports such that they are located proximally of the filtration device when the filtration device is entirely contained within the shaft lumen. (Figures 1B and 3C)

Claims 1, 3, 4, 6-10, 12-14, 21, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belef et al. (US 7,169,165) in view Perkins et al. (US 6,398,775) as applied to claim 23 above, and further in view of Tao (US 6,610,005).

Regarding claims 1, 3, 4, 6-10, 12-14, 21, 22 and 26, the Belef filtration device 50 is a floating filter 50 and is fixedly attached to a wire. (Figures 1B and 3A) The aspiration ports are located both along the circumference and along the length of the shaft. A guidewire passes through the proximal most aspiration port 16. Thus, Belef and Perkins teach all elements of claims 1, 3, 4, 6-14, 21, 22 and 26 except for an operable end cap disposed on the elongated shaft distal to the filtration device. Tao discloses a number of end cap embodiments that are fixedly attached to the distal end of a catheter 24 for preventing debris from entering the catheter while it is advanced through a body lumen. (Figures 4-10 and 20-22) It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the apparatus of Belef by providing an end cap fixedly attached to the end of the shaft 10 in order to achieve these benefits.

Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belef et al. (US 7,169,165) in view of Perkins et al. (US 6,398,775) and Tao (US 6,610,005) as applied to claim 1 above, and further in view of Hoy (US 6,705,575).

Regarding claims 27-29, Tao teaches providing an end cap such as that shown in Figure 22 on the distal end of the Belef catheter 10 as discussed above. This end cap comprises a plurality of plates, but it is unclear whether the plates will interleave to

any degree during operation. Hoy discloses a device having a related cap-like means 40 comprising a plurality of overlapping plates 44 (Figures 1 and 5A-5C). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the plates of the Tao cap such that they interleave since interleaving plates were well known and it causing the plates to interleave would not have produced unexpected results. The plates form a dome shape as shown in Figure 20 of Tao. The shape depicted in Figure 20 may also be considered to generally comprise a cone shape. Alternatively, it would have been obvious to form the plates such that they form a cone shape since this issue is an obvious matter of design choice and would not materially affect the function of the device.

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 4, 6-10, 12-14, 23 and 26-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Blatt whose telephone number is 571-272-9735. The examiner can normally be reached on Monday-Friday, 9:00 AM-6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jackson can be reached on 571-272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. B./
Examiner, Art Unit 3734

/Gary Jackson/
Supervisory Patent Examiner, Art Unit 3734
February 19, 2011